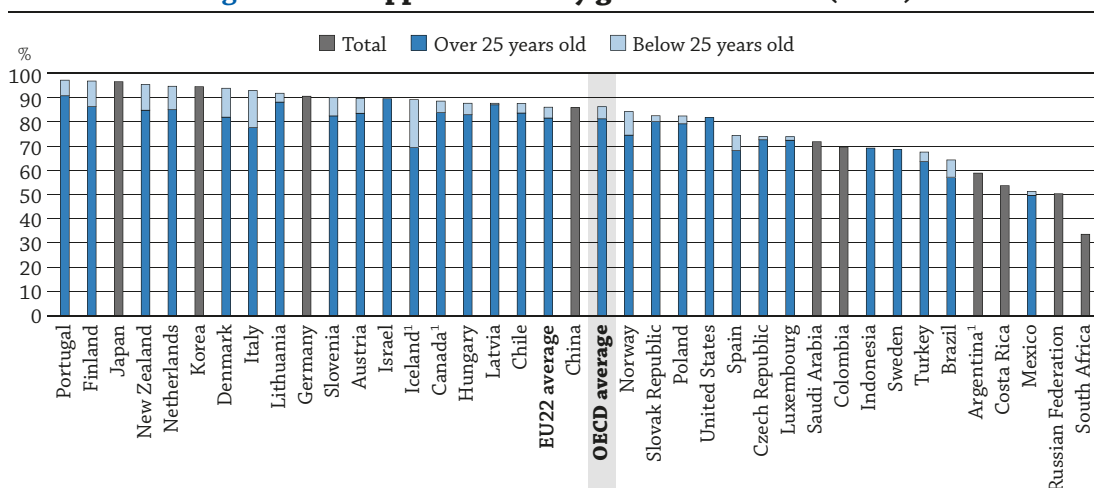


## HOW MANY STUDENTS ARE EXPECTED TO COMPLETE UPPER SECONDARY EDUCATION?

- Based on current patterns, it is estimated that an average of 85% of today's young people in OECD countries will complete upper secondary education over their lifetime.
- The fields of study with the lowest gender diversity in upper secondary vocational programmes are engineering, manufacturing and construction, where women represent 12% of graduates, and health and welfare, where men represent 17% of graduates.
- The average age of graduates from upper secondary education is 19 in general programmes and 23 in vocational programmes. In post-secondary non-tertiary education, the average graduation age is 30.

**Figure A2.1. Upper secondary graduation rates (2014)**



**Note:** Solid grey bar indicates the graduation rates when no data by age are available.

1. Year of reference 2013.

Countries are ranked in descending order of first-time upper secondary graduation rates.

**Source:** OECD. Table A2.1 and *Education at a Glance* (database). See Annex 3 for notes ([www.oecd.org/education/education-at-a-glance-19991487.htm](http://www.oecd.org/education/education-at-a-glance-19991487.htm)).

**StatLink**  <http://dx.doi.org/10.1787/888933396676>

### Context

Upper secondary education, which consolidates students' basic skills and knowledge through either academic or vocational pathways, aims to prepare students to enter further levels of education or the labour market and to become engaged citizens. In many countries, this level of education is not compulsory and can last from two to five years. What is crucial, however, is providing education of good quality that meets the needs of society and the economy.

Graduating from upper secondary education has become increasingly important in all countries, as the skills needed in the labour market are becoming more knowledge-based, and workers are progressively required to adapt to the uncertainties of a rapidly changing global economy. However, while graduation rates give an indication of the extent to which education systems are succeeding in preparing students to meet the minimum requirements of the labour market, they do not capture the quality of education outcomes.

One of the challenges facing education systems in many OECD countries is students' disengagement and consequent dropout from the education system, meaning that they leave school without an upper secondary qualification. These young people tend to face severe difficulties entering – and remaining in – the labour market. Leaving school early is a problem, for both individuals and society. Students' lack of motivation can be the result of poor performance at school, which can, in turn, lead to further disengagement, creating a vicious circle. Recent evidence shows that the risk of lower performance at school can be higher depending on students' socio-economic, demographic and

educational backgrounds (Box A2.1). Policy makers are examining ways to reduce the number of early school-leavers (defined as those students who do not complete their upper secondary education). Internationally comparable measures of how many students successfully complete upper secondary programmes – which also imply how many students do not complete those programmes – can assist efforts to this end.

### ■ Other findings

- In 23 of 37 countries with available data, more than 75% of young people have graduated from upper secondary education. In 11 countries, the first-time graduation rate exceeds 90%.
- On average across OECD countries, 80% of those graduating from an upper secondary vocational programme are younger than 25, and 46% are women.
- Some 10% of young people are expected to graduate from a post-secondary non-tertiary vocational programme; 54% of them are women.
- Most young men in upper secondary vocational programmes study engineering, manufacturing and construction, while young women form the majority in all other fields of study in vocational programmes.

### ■ Trends

In countries for which comparable trends data are available for 2005, 2010 and 2014, the first-time graduation rate at the upper secondary level increased by 4 percentage points between 2005 and 2014. This increase was striking in two countries: Portugal (from 54% to 97%) and Turkey (from 48% to 68%). By contrast, in some countries, graduation rates declined during the period, including in the Czech Republic, where graduation rates dropped from 116% in 2005 to 74% in 2014.

Graduation rates from general upper secondary programmes increased, on average, by 3 percentage points from 2005 to 2014, and graduation rates from vocational programmes increased by 4 percentage points. A few countries developed vocational education systems that grew quickly during the period. Graduation rates from vocational programmes in Australia and in Portugal, for example, increased by more than 40 percentage points.

The prevalence of post-secondary non-tertiary vocational education remained constant over the same period; the average graduation rate among OECD countries was about 10% between 2005 and 2014. In Australia, graduation rates from post-secondary non-tertiary vocational education increased by 26 percentage points, so that 44% of students in Australia are now expected to graduate from one of these programmes.

### ■ Note

Graduation rates represent the estimated percentage of people from a given age cohort that is expected to graduate at some point during their lifetime. This estimate is based on the number of graduates in 2014 and the age distribution of this group. Graduation rates are based on both the population and the current pattern of graduation, and are thus sensitive to any changes in the education system, such as the introduction of new programmes, and changes in the duration of programmes. Graduation rates can be very high – even above 100% – during a period when an unexpected number of people go back to school.

When the age breakdown is not available, the gross graduation rate is calculated instead. This refers to the total number of graduates divided by the average cohort of the population at the typical age provided by the country.

In this indicator, age refers generally to the age of students at the beginning of the calendar year. Students could be one year older than the age indicated when they graduate at the end of the school year. Twenty-five is regarded as the upper age limit for completing secondary education. Across OECD countries, more than 95% of graduates from upper secondary general programmes in 2014 were under age 25. People who graduate from this level at age 25 or older are usually enrolled in second-chance programmes.

Analysis

Graduation from upper secondary programmes

A snapshot of upper secondary graduation rates

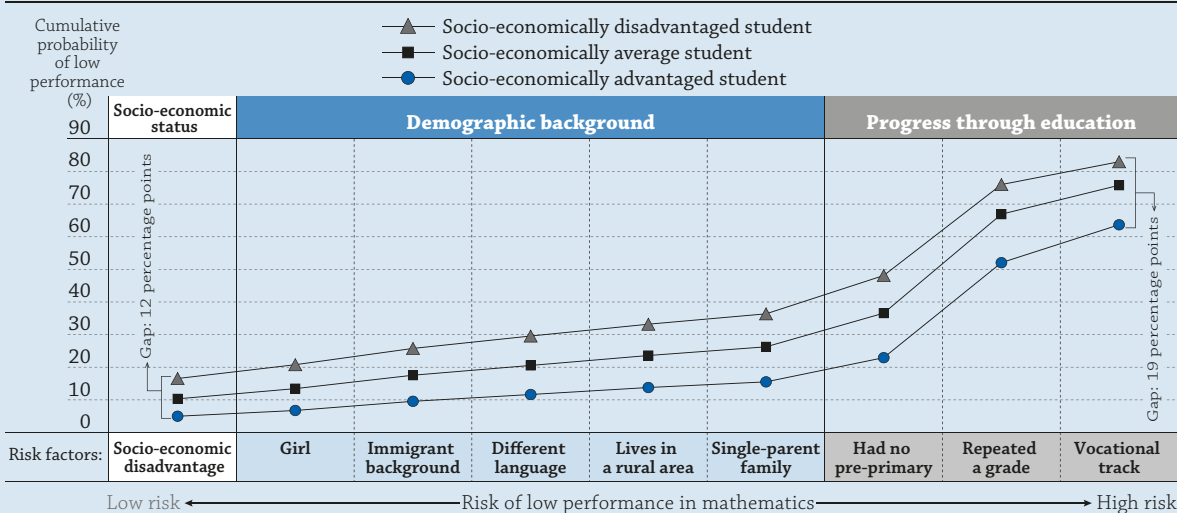
Current estimates indicate that, on average, 85% of people across OECD countries will complete upper secondary education over their lifetime (Table A2.1). An upper secondary education is often considered to be the minimum credential for successful entry into the labour market and necessary for continuing to further education. The costs of not completing this level of education on time can be considerable to both individuals and society (see Indicators A6 and A7).

Box A2.1. The cumulative risk of low performance at age 15

Far too many students around the world are trapped in a vicious circle of poor performance and demotivation that leads only to more bad marks and further disengagement from school. Worse, poor performance at school has long-term consequences, both for the individual and for society as a whole. Students who perform poorly at age 15 face a high risk of dropping out of school without obtaining an upper secondary qualification. When a large share of the population lacks basic skills, a country’s long-term economic growth is also severely compromised (OECD, 2016).

The OECD Programme for International Student Assessment (PISA) defines “low performers” as those who score below Level 2 on the PISA mathematics, reading and/or science scales. These students will find it difficult to leave education systems with an upper secondary qualification. Reducing the number of low-performing students is not only a goal in its own right, but also an effective way to improve an education system’s overall performance – and to boost equity, since low performers are disproportionately from socio-economically disadvantaged families.

Figure A2.a. Cumulative probability of low performance in mathematics across risk profiles  
Variations between levels of socio-economic advantage across risk profiles (OECD average)



**Notes:** Risk profiles are based on students’ socio-economic, demographic and education characteristics. The profile of a low-risk student is a student who is a boy, has no immigrant background, speaks the same language at home as the language of assessment, lives in a two-parent family, attends a school located in a city, attended pre-primary education for more than one year, has not repeated a grade, and is enrolled in a general track.

A socio-economically advantaged student is a student at the top quarter of the PISA index of economic, social and cultural status (ESCS). A socio-economically disadvantaged student is a student at the bottom quarter of ESCS, and a socio-economically average student is a student at the average of the second and third quarters of ESCS.

Coefficient estimates come from a multivariate logistic regression with low performance in mathematics as the outcome and each of the variables in the figure as a covariate.

**Source:** OECD (2016), *Low-performing Students: Why They Fall Behind and How to Help Them Succeed*, PISA, OECD Publishing, Paris, Figure 2.19.

StatLink <http://dx.doi.org/10.1787/888933396712>

Analyses show that poor performance at age 15 is not the result of any single risk factor, but rather of a combination and accumulation of various barriers and disadvantages that affect students throughout their lives. On average across OECD countries, a socio-economically disadvantaged girl who lives in a single-parent family in a rural area, has an immigrant background, speaks a different language at home from the language of instruction, had not attended pre-primary school, had repeated a grade and is enrolled in a vocational track has an 83% probability of being a low performer (Figure A2.a). While these background factors can affect all students, among low performers, the combination of risk factors is more detrimental to disadvantaged students than to advantaged students. Indeed, all of the demographic characteristics considered in the report, as well as the lack of pre-primary education, increase the probability of low performance by a larger margin among disadvantaged students than among advantaged students, on average across OECD countries. Only repeating a grade and enrolment in a vocational track have greater penalties for advantaged students than for disadvantaged students.

As shown in Figure A2.a, the probability of low performance in mathematics varies by socio-economic status, as indicated by the three symbols (circle, square and triangle). On average across OECD countries, a student with a low-risk profile who comes from a disadvantaged family has a 17% probability of low performance in mathematics, whereas a student who comes from a socio-economically average family has a 10% probability, and an advantaged student has a 5% probability. On average across OECD countries, a student with a high-risk profile who comes from a disadvantaged family has an 83% probability of low performance in mathematics, compared to a 76% probability for a student who comes from a socio-economically average family and a 64% probability for an advantaged student. These findings show that while differences in socio-economic status matter, other factors also have to be considered when designing policies to tackle low performance among students and increase upper secondary graduation rates. Overall, the widening of the gap across the risk spectrum indicates that the concentration of different kinds of risk factors is more detrimental to disadvantaged students. In other words, disadvantaged students tend not only to be encumbered with more risk factors than advantaged students, but those risk factors have a stronger impact on their performance.

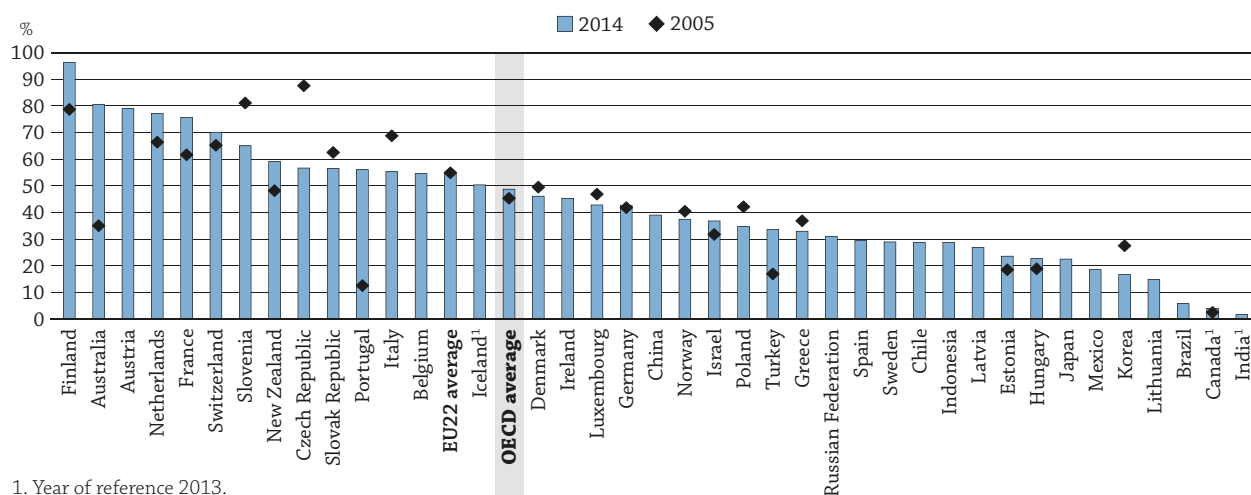
Graduation rates offer an indication of whether government initiatives have been successful in increasing the number of people who graduate from upper secondary education. The large differences in graduation rates among countries reflect the variety of systems and programmes available, as well as other country-specific factors, such as current social norms and economic performance.

In 11 countries among those with data available, 90% or more of people are expected to graduate from upper secondary school during their lifetime, but just 34% of young people in South Africa are expected to do so. In almost all countries, women are more likely than men to complete upper secondary education. The largest gender gap is observed in Iceland, where 100% of young women are expected to graduate at least once from upper secondary education, while only 79% of young men will do so (Table A2.1).

Women are more likely than men to graduate from general programmes in all countries, while men are more likely to graduate from vocational programmes in 32 of the 39 countries with available data. Vocational education and training (VET) is an important part of upper secondary education in many OECD countries, and it can play a central role in preparing young people for work, developing adults' skills and responding to labour market needs (see Indicator A1). But in some countries, VET has been neglected and marginalised in policy discussions, often overshadowed by the increasing emphasis on general academic education. Nevertheless, an increasing number of countries are recognising that good initial VET has a major contribution to make to economic competitiveness (OECD, 2015). This is one of the explanations for the increase in graduation rates from upper secondary vocational programmes between 2005 and 2014.

On average across OECD countries, 46% of young people will graduate from an upper secondary vocational programme. Although many countries have developed extensive vocational programmes at the secondary level, in other countries, most students prefer general programmes. As shown in Figure A2.2, large proportions of students in Australia, Austria, Finland and the Netherlands are expected to graduate from an upper secondary vocational programme. But in Canada, the proportion of young people expected to graduate from a vocational programme is considerably smaller. Vocational programmes in Canada are often offered within the post-secondary system, and vocational training at the secondary level is largely a second-chance programme for older students. In fact, 66% of graduates from upper secondary vocational programmes in Canada are older than 25 (Table A2.2).

A2

**Figure A2.2. Change in vocational upper secondary graduation rates (2005 and 2014)**


1. Year of reference 2013.

Countries are ranked in descending order of vocational upper secondary graduation rates in 2014.

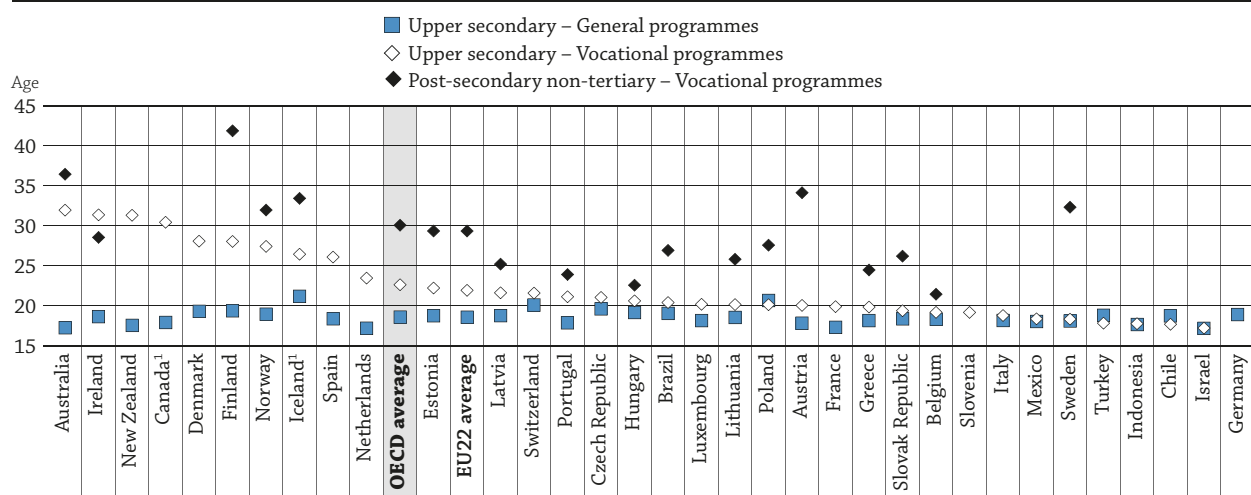
 Source: OECD, Table A2.4. See Annex 3 for notes ([www.oecd.org/education/education-at-a-glance-19991487.htm](http://www.oecd.org/education/education-at-a-glance-19991487.htm)).

 StatLink <http://dx.doi.org/10.1787/888933396680>

Graduation rates, however, do not imply that all graduates will pursue a tertiary degree or enter the labour force immediately. Indeed, the number of graduates who wind up neither employed nor in education or training (NEET) has been growing throughout OECD countries (see Indicator C5). For this reason, it is important to have high-quality upper secondary programmes that provide individuals with the right mix of guidance and education opportunities to ensure there are no dead ends once students have graduated.

### Profile of an upper secondary graduate

Graduation rates also vary according to the age of the students. Students' age at graduation can be related to changes in the education system, such as when opportunities become available to complete upper secondary education later on in life or when the duration of general and vocational programmes is altered. The average age of graduates from upper secondary general programmes is 19, and varies from 17 in Australia, France, Israel and the Netherlands to 21 in Iceland and Poland (Figure A2.3).

**Figure A2.3. Average age of graduates for upper secondary and post-secondary non-tertiary education, by programme orientation (2014)**


1. Year of reference 2013.

Countries are ranked in descending order of the average age of upper secondary graduates in vocational programmes.

 Source: OECD, Tables A2.2. See Annex 3 for notes ([www.oecd.org/education/education-at-a-glance-19991487.htm](http://www.oecd.org/education/education-at-a-glance-19991487.htm)).

 StatLink <http://dx.doi.org/10.1787/888933396698>

The variation in average age of graduation is much more pronounced among students in vocational programmes, ranging from 17 in Israel to 32 in Australia, where only 40% of graduates are younger than 25. Across OECD countries, the average age of graduation from upper secondary vocational programmes is 23.

Most graduates in vocational programmes earned a degree in sciences and engineering (37%), or education, humanities and social sciences (27%). In three countries, the largest proportions of graduates studied health and welfare: Denmark (28%), Ireland (55%) and the Netherlands (26%).

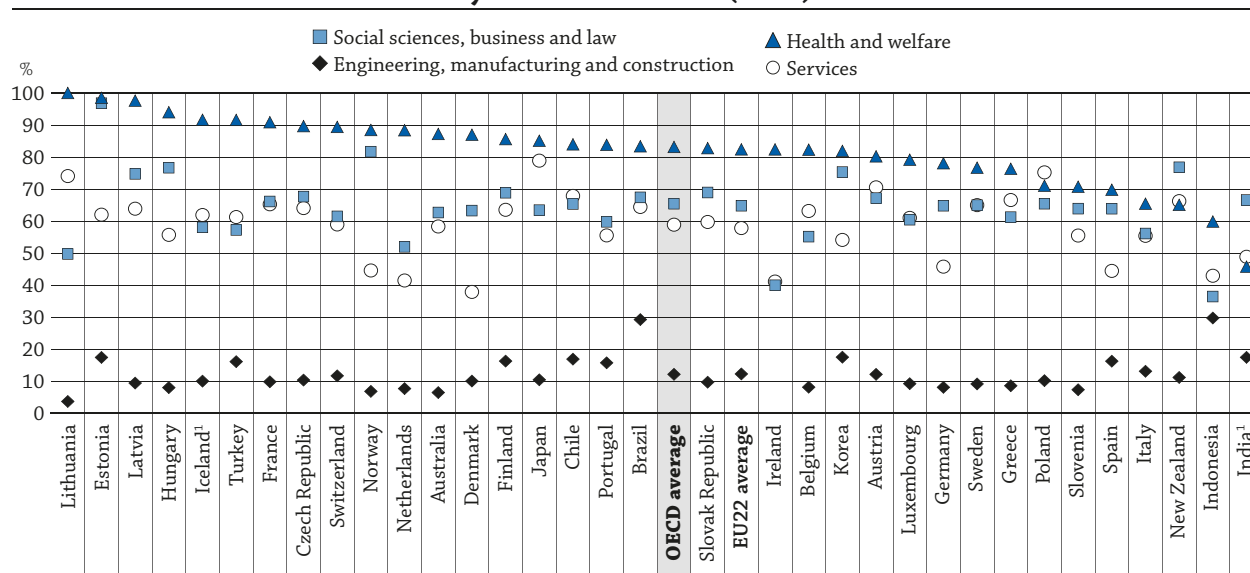
Gender differences are also apparent in young people's choice of field of study when pursuing vocational education. These differences can be attributed to traditional perceptions of gender roles and identities, as well as to the cultural values sometimes associated with particular fields of education.

As Figure A2.4 shows, the percentage of women pursuing an engineering, manufacturing and construction programme is low at upper secondary vocational level: only 12% of all graduates in this field of education are women. In contrast, women are over-represented in health and welfare, where 83% of graduates are women. The share of men graduating in health and welfare does not surpass 35% in any OECD country. Between these two extremes, there are some fields of study with greater gender diversity: on average, 59% of graduates in the field of services are women, as are 65% of graduates in social sciences, business and law.

At the tertiary level, the discrepancies remain, but they are less pronounced than in upper secondary education. For more details on the profile of students in tertiary education, please refer to Indicator A3 of this publication.

The relevance of gender balance across fields of study is twofold. From the economic point of view, there is evidence of gains in GDP from more balanced market participation between male and female workers (IMF, 2013). There is also a moral imperative to ensure that men and women have the same opportunities in their personal and professional lives. In this, formal education plays an important role (OECD, 2015a).

**Figure A2.4. Share of female graduates from upper secondary vocational programmes, by field of education (2014)**



1. Year of reference 2013.

Countries are ranked in descending order of the share of female graduates from upper secondary vocational programmes in health and welfare.

Source: OECD. Table A2.2. See Annex 3 for notes ([www.oecd.org/education/education-at-a-glance-19991487.htm](http://www.oecd.org/education/education-at-a-glance-19991487.htm)).

StatLink <http://dx.doi.org/10.1787/888933396706>

### Vocational and educational training

Vocational education and training is mainly designed to help participants acquire the practical skills, know-how and understanding necessary for employment in a particular occupation or trade. Across OECD countries, 46% of students are expected to graduate from a vocational programme at the upper secondary level. However, the importance of VET systems varies widely across countries. In some countries, VET plays a central role in the initial education of young people, while in other countries, most students go into general education.

Vocational programmes can be offered in combined school-based and work-based programmes, where only up to 75% of the curriculum is presented in the school environment or through distance education. These include apprenticeship programmes that involve concurrent school-based and work-based training, and programmes that involve alternating periods of attendance at educational institutions and participation in work-based training. This type of dual system can be found in Austria, the Czech Republic, Denmark, Germany, Hungary, the Netherlands, the Slovak Republic and Switzerland (OECD, 2015b). Through work-based learning, students acquire the skills that are valued in the workplace. Work-based learning is also a way to develop public-private partnerships and to involve social partners and employers in developing VET programmes, often by defining curricular frameworks.

Moreover, high-quality VET programmes tend to be effective in developing skills among those who would otherwise lack the qualifications to ensure a smooth and successful transition into the labour market. Employment rates are higher, and inactivity rates are lower, among people who graduated from vocational training than among those who pursued an upper secondary general programme as their highest level of educational attainment (see Indicator A5). However, it is important to ensure that graduates of upper secondary VET programmes have good employment opportunities, since VET can be more expensive than other education programmes (see Indicator B1).

### ***A snapshot of post-secondary non-tertiary graduation rates***

Various kinds of post-secondary non-tertiary programmes are offered in OECD countries. These programmes straddle upper secondary and post-secondary education and may be considered as either upper secondary or post-secondary programmes, depending on the country. Although the content of these programmes may not be significantly more advanced than upper secondary programmes, they broaden the knowledge of individuals who have already attained an upper secondary qualification.

First-time graduation rates from post-secondary non-tertiary education are low compared to those from upper secondary programmes. On average, it is estimated that 10% of today's young people in OECD countries will complete post-secondary non-tertiary programmes over their lifetime. The first-time graduation rate among women (12%) is higher than among men (9%). In all countries, except China, Hungary, Iceland, Luxembourg, Portugal, the Slovak Republic and Switzerland, women's first-time graduation rates at the post-secondary non-tertiary level are higher than those of men. The highest first-time graduation rates for these programmes are observed in Australia (20%), the Czech Republic (30%), Germany (26%), New Zealand (27%) and the United States (22%) (Table A2.1). Six countries do not offer this level of education (Chile, Indonesia, Mexico, Slovenia, Turkey and the United Kingdom).

### ***Profile of post-secondary non-tertiary graduates from vocational programmes***

Post-secondary non-tertiary education vocational programmes are offered by 28 of the 35 OECD countries and by 10 of the 11 partner countries. Some countries that do not offer programmes at this level (ISCED 4) have high graduation rates from vocational programmes at a lower level of education (ISCED 3), such as 65% in Slovenia and 70% in Switzerland (Table A2.1).

In comparison to upper secondary education, post-secondary non-tertiary education is fairly common among older students, as shown in Figure A2.3. The average age of graduates from this level is 30. In many countries, these graduates had taken time off after they graduated from the previous education level. In other countries, these are second-chance programmes designed to encourage adults to re-enter education. However, in some countries, graduates from post-secondary non-tertiary education are relatively young, as in Belgium (21 years old) and Hungary (23 years old).

The share of female graduates from post-secondary non-tertiary vocational programmes varies widely, from 75% in Poland to 25% in the Netherlands. This is partially explained by the fields of study offered at this level of education. In Austria, for instance, 53% of graduates pursued a degree in health and welfare, whereas in Netherlands, 69% of graduates studied engineering, manufacturing and construction.

On average, most students graduate from post-secondary non-tertiary vocational programmes with degrees in engineering, manufacturing and construction (22%), or social sciences, business and law (20%). The least popular fields are education (7%), humanities and arts (7%), agriculture (4%) and sciences (4%). For some countries, a single field dominates post-secondary non-tertiary education. For instance, in Denmark, 97% of students graduate with a degree in social sciences, business and law, while in the Netherlands, 69% of graduates earn a degree in engineering, manufacturing and construction.

**Box A2.2. Male teachers and the motivation of male students**

There is sometimes a tendency to attribute lower performance of boys at school to the fact that a low share of their teachers are male. Recent studies have shown that there is unlikely to be a connection between these two facts (Cho, 2012; Neugebauer and Gerth, 2013; Winters et al., 2013). This does not mean, however, that policies aiming for a better balance between men and women among teachers are misguided.

The importance of having more male teachers at initial levels of education is primarily to provide role models for students, particularly for those who lack positive male influences in their lives. Furthermore, teachers often serve as examples and sources of inspiration to their students. In that sense, disinterest in school among male students and lack of motivation to conclude their basic education could eventually be addressed through a larger presence of male teachers with whom they can identify.

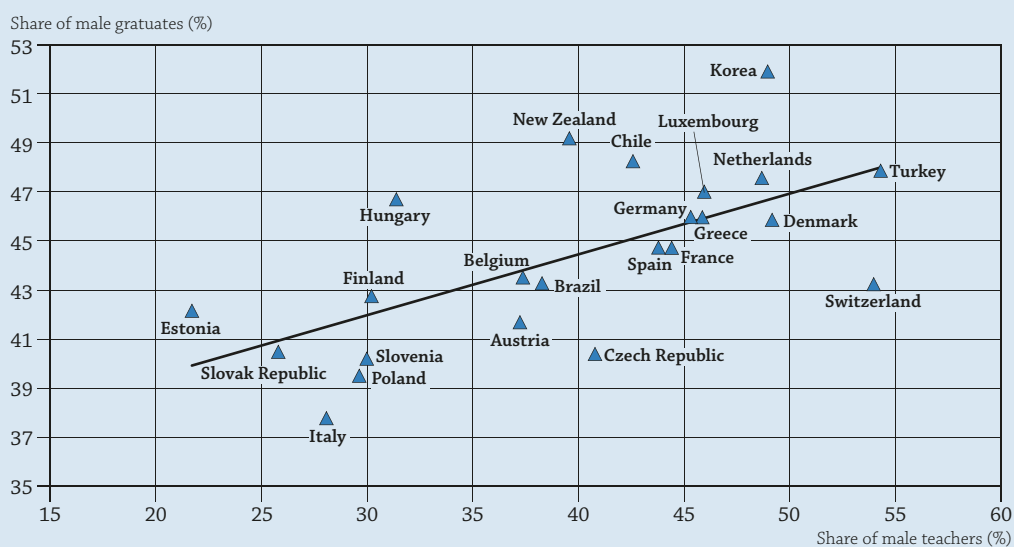
The disengagement of male students is a problem in many education systems. In all OECD countries with available data, young men are less likely than young women to complete their upper secondary education (OECD, 2014).

In 2014, the share of male students graduating from upper secondary general programmes was lower than the share of female students (Table A2.2). In all countries with available data, except China, Korea and Ireland, women make up the majority of upper secondary graduates from general programmes, averaging 55% of graduates among OECD countries. At this level, on average, around 38% of teachers are men (see Indicator D5).


Figure A2.b shows that a larger share of male graduates in general programmes at upper secondary level is correlated with a larger share of male teachers. In Turkey, for example, where 54% of upper secondary teachers in general programmes are men, the share of male graduates at this level is 48%. However, in the Slovak Republic, only 26% of upper secondary teachers are men, and the share of male graduates is 40%.

The observed trend, far from conclusive, might contribute to the existing debate on student-teacher gender matching in schools. For more information on drivers of gender imbalance in the teaching profession, please see Box D5.

**Figure A2.b. Share of male teachers and male graduates at upper secondary level, general programmes (2014)**



**Source:** OECD (2016), "Profiles of graduates and new entrants", *Education at a Glance* (database), [http://stats.oecd.org/Index.aspx?datasetcode=EAG\\_GRAD\\_ENTR\\_SHARE](http://stats.oecd.org/Index.aspx?datasetcode=EAG_GRAD_ENTR_SHARE) and "Distribution of teachers by age and gender", *Education at a Glance* (database), [http://stats.oecd.org/Index.aspx?datasetcode=EAG\\_PERS\\_SHARE\\_AGE](http://stats.oecd.org/Index.aspx?datasetcode=EAG_PERS_SHARE_AGE). See Annex 3 for notes ([www.oecd.org/edu/education-at-a-glance-19991487.htm](http://www.oecd.org/edu/education-at-a-glance-19991487.htm)).

StatLink  <http://dx.doi.org/10.1787/888933396728>



## Definitions

**Graduates** in the reference period can be either first-time graduates or repeat graduates. A **first-time graduate** is a student who has graduated for the first time at a given level of education in the reference period. Thus, if a student has graduated multiple times over the years, he or she is counted as a graduate each year, but as a first-time graduate only once.

**Gross graduation rates** refer to the total number of graduates (the graduates themselves may be of any age) at the specified level of education divided by the population at the typical graduation age from the specified level.

**Net graduation rates** represent the estimated percentage of an age group that will complete upper secondary education, based on current patterns of graduation.

**Typical age** is the age at the beginning of the last school/academic year of the corresponding educational level and programme when the degree is obtained.

## Methodology

Data refer to the academic year 2013/14 and are based on the UNESCO-UIS/OECD/EUROSTAT data collection on education statistics administered by the OECD in 2015 (for details, see Annex 3 at [www.oecd.org/education/education-at-a-glance-19991487.htm](http://www.oecd.org/education/education-at-a-glance-19991487.htm)).

Unless otherwise indicated, graduation rates are calculated as net graduation rates (i.e. as the sum of age-specific graduation rates). Gross graduation rates are presented for countries that are unable to provide such detailed data. In order to calculate gross graduation rates, countries identify the age at which graduation typically occurs (see Annex 1). The number of graduates, regardless of their age, is divided by the population at the typical graduation age. In many countries, defining a typical age of graduation is difficult, however, because graduates are dispersed over a wide range of ages.

Graduates by programme orientation at ISCED 3 and ISCED 4 are not counted as first-time graduates, given that many students graduate from more than one upper secondary or post-secondary non-tertiary programme. Therefore, graduation rates cannot be added, as some individuals would be counted twice. In addition, the typical graduation ages are not necessarily the same for the different types of programmes (see Annex 1). Vocational programmes include both school-based programmes and combined school-based and work-based programmes that are recognised as part of the education system. Entirely work-based education and training programmes that are not overseen by a formal education authority are not included.

### Note regarding data from Israel

The statistical data for Israel are supplied by and are under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.

## References

- Cho, I. (2012), "The effect of teacher-student gender matching: Evidence from OECD countries", *Economics of Education Review*, Vol. 31, pp. 54-67.
- Elborgh-Woytek, K. et al. (2013), *Women, Work, and the Economy: Macroeconomic Gains from Gender Equity*, IMF (International Monetary Fund) IMF Staff Discussion Note, IMF, Washington, <http://www.imf.org/external/pubs/ft/sdn/2013/sdn1310.pdf> (accessed 20 February 2014).
- Neugebauer, M. and M. Gerth (2013) "Weiblicher Schulkontext und Schulerfolg von Jungen" [Teenage school context and educational attainment of boys], in R. Becker and A. Schulze (eds.), *Bildungskontexte* [Educational Contexts], Springer Fachmedien, Wiesbaden, pp. 431-455.
- OECD (2016), *Low-Performing Students: Why They Fall Behind and How to Help Them Succeed*, PISA, OECD Publishing, Paris, <http://dx.doi.org/10.1787/9789264250246-en>.
- OECD (2015a) "Gender equality", *Trends Shaping Education 2015: Spotlight 7*, OECD, Paris, <http://www.oecd.org/edu/cei/Spotlight7-GenderEquality.pdf>.
- OECD (2015b), "Focus on vocational education and training (VET) programmes", *Education Indicators in Focus*, No. 33, OECD Publishing, Paris, <http://dx.doi.org/10.1787/5jrxtk4cg7wg-en>.

OECD (2014), “Indicator A2: How many students are expected to complete upper secondary education?”, in OECD, *Education at a Glance 2014: OECD Indicators*, OECD Publishing, Paris, <http://dx.doi.org/10.1787/eag-2014-7-en>.

Winters, M. et al (2013), “The effect of same-gender teacher assignment on student achievement in the elementary and secondary grades: Evidence from panel data”, *Economics of Education Review*, Vol. 34, pp. 69-75.

### Indicator A2 Tables

StatLink  <http://dx.doi.org/10.1787/888933396628>

<b>Table A2.1</b>	<b>Upper secondary and post-secondary non-tertiary graduation rates (2014)</b>
<b>Table A2.2</b>	<b>Profile of upper secondary graduates from general and vocational programmes (2014)</b>
<b>Table A2.3</b>	<b>Profile of post-secondary non-tertiary graduates from vocational programmes (2014)</b>
<b>Table A2.4</b>	<b>Trends in upper secondary and post-secondary non-tertiary graduation rates (2005, 2010 and 2014)</b>

Cut-off date for the data: 20 July 2016. Any updates on data can be found on line at: <http://dx.doi.org/10.1787/eag-data-en>


Table A2.1. **Upper secondary and post-secondary non-tertiary graduation rates (2014)***Sum of age-specific graduation rates, by gender and programme orientation*

	Upper secondary									Post-secondary non-tertiary					
	First-time graduation rates			Graduation rates						First-time graduation rates			Graduation rates		
	All programmes			General programmes			Vocational programmes			All programmes			Vocational programmes		
	M + W (1)	Men (2)	Women (3)	M + W (4)	Men (5)	Women (6)	M + W (7)	Men (8)	Women (9)	M + W (10)	Men (11)	Women (12)	M + W (13)	Men (14)	Women (15)
<b>OECD</b>															
Australia	m	m	m	74	71	78	80	83	78	20	18	22	44	40	49
Austria	90	89	90	20	16	24	79	83	75	9	5	14	11	6	16
Belgium	m	m	m	38	32	44	55	55	54	m	m	m	7	7	7
Canada <sup>1</sup>	89	85	93	85	80	90	4	5	3	m	m	m	m	m	m
Chile	88	84	91	59	55	62	29	29	29	a	a	a	a	a	a
Czech Republic	74	74	74	22	17	27	57	62	51	30	21	39	8	7	8
Denmark	94	89	99	68	61	75	46	45	48	1	0	1	1	0	1
Estonia	m	m	m	60	49	71	24	29	18	m	m	m	23	17	30
Finland	97	94	100	46	38	53	96	89	104	7	6	8	8	7	9
France	m	m	m	54	47	61	76	75	76	m	m	m	m	m	m
Germany	91	92	90	48	43	53	43	49	36	26	21	31	22	17	28
Greece	m	m	m	70	64	77	33	39	27	m	m	m	4	3	5
Hungary	88	85	91	66	60	72	23	26	19	16	17	16	18	18	17
Iceland <sup>1</sup>	89	79	100	74	61	86	50	53	48	12	14	9	12	15	9
Ireland	m	m	m	111	108	114	45	31	60	m	m	m	13	17	9
Israel	90	87	93	53	50	56	37	37	37	m	m	m	a	a	a
Italy	93	92	94	38	28	49	55	64	46	1	1	2	1	1	2
Japan	97	96	98	74	71	78	23	25	20	m	m	m	m	m	m
Korea	95	95	94	78	77	79	17	18	15	m	m	m	m	m	m
Latvia	88	84	92	67	60	75	27	31	22	7	4	10	7	4	10
Luxembourg	74	73	75	33	30	36	43	45	40	2	2	1	2	2	1
Mexico	51	49	54	33	30	35	19	19	19	a	a	a	a	a	a
Netherlands	95	90	99	42	39	45	77	77	77	0	0	0	0	0	0
New Zealand	95	92	100	76	73	80	59	47	71	27	21	33	m	m	m
Norway	84	79	90	62	51	73	37	44	30	4	3	5	4	3	5
Poland	83	80	85	49	38	61	35	44	25	15	7	23	15	7	23
Portugal	97	95	100	41	34	49	56	61	51	6	7	4	6	7	4
Slovak Republic	83	81	85	27	21	33	57	60	53	9	9	8	9	9	8
Slovenia	90	89	91	36	28	44	65	71	58	a	a	a	a	a	a
Spain	74	68	81	53	47	61	29	28	31	0	0	0	0	0	0
Sweden	69	65	73	48	43	55	29	33	26	4	3	4	4	4	4
Switzerland	m	m	m	42	35	49	70	75	65	1	1	1	a	a	a
Turkey	68	66	70	34	32	36	34	34	33	a	a	a	a	a	a
United Kingdom	m	m	m	m	m	m	m	m	m	a	a	a	a	a	a
United States	82	79	85	m	m	m	m	m	m	22	17	27	22	17	27
<b>OECD average</b>	85	83	88	54	48	60	46	47	44	10	9	12	10	9	12
<b>EU22 average</b>	86	84	89	49	43	56	50	52	47	9	7	11	8	7	10
<b>Partners</b>															
Argentina <sup>1</sup>	59	49	69	m	m	m	m	m	m	m	m	m	m	m	m
Brazil	64	55	74	62	53	70	6	5	7	7	7	8	8	7	9
China	86	84	88	47	44	50	39	40	38	5	6	4	2	3	1
Colombia	70	62	78	m	m	m	m	m	m	m	m	m	m	m	m
Costa Rica	54	47	61	m	m	m	m	m	m	m	m	m	m	m	m
India <sup>1</sup>	m	m	m	m	m	m	2	3	1	1	1	2	1	1	2
Indonesia	69	74	64	40	38	43	29	36	21	a	a	a	a	a	a
Lithuania	92	89	95	77	71	85	15	19	11	15	15	15	18	18	18
Russian Federation	50	44	57	52	46	59	31	47	14	5	5	5	5	5	5
Saudi Arabia	72	78	66	m	m	m	m	m	m	m	m	m	m	m	m
South Africa	34	32	35	m	m	m	m	m	m	m	m	m	m	m	m
<b>G20 average</b>	74	71	76	55	50	60	32	35	29	10	8	11	12	10	13

1. Year of reference 2013.

Sources: OECD. Argentina, China, Colombia, Costa Rica, India, Indonesia, Saudi Arabia, South Africa: UNESCO Institute for Statistics. Lithuania: Eurostat. See Annex 3 for notes ([www.oecd.org/education/education-at-a-glance-19991487.htm](http://www.oecd.org/education/education-at-a-glance-19991487.htm)).

Please refer to the Reader's Guide for information concerning symbols for missing data and abbreviations.

StatLink  <http://dx.doi.org/10.1787/888933396636>

**Table A2.2. Profile of upper secondary graduates from general and vocational programmes (2014)**

	General programmes						Vocational programmes												
	Percentage of graduates younger than 25 years	Average age	Percentage of female graduates	Percentage of graduates younger than 25 years	Average age	Percentage of female graduates	Percentage of graduates by field of education							Percentage of female graduates in upper secondary programmes by field of education					
							Education	Humanities and arts	Social sciences, business and law	Sciences	Engineering, manufacturing and construction	Agriculture	Health and welfare	Services	Social sciences, business and law	Engineering, manufacturing and construction	Health and welfare	Services	
							(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
<b>OECD</b>																			
Australia	100	17	51	40	32	48	2	1	20	2	35	3	23	14	63	7	87	58	
Austria	99	18	58	88	20	46	2	2	29	2	35	8	3	19	67	12	80	71	
Belgium	100	18	56	100	19	49	0	6	20	2	29	3	27	13	55	8	82	63	
Canada <sup>1</sup>	97	18	52	34	30	42	m	m	m	m	m	m	m	m	m	m	m	m	
Chile	94	19	52	99	18	49	6	1	34	0	38	5	6	11	65	17	84	68	
Czech Republic	100	20	60	92	21	44	2	4	22	4	38	4	7	20	68	10	90	64	
Denmark	96	19	54	53	28	51	0	2	25	1	24	6	28	14	63	10	87	38	
Estonia	97	19	58	84	22	37	0	4	3	8	50	7	2	25	97	17	99	62	
Finland	99	19	57	55	28	53	0	6	16	2	30	5	20	22	69	16	86	64	
France	100	17	55	89	20	50	0	2	21	0	34	4	19	21	66	10	91	65	
Germany	100	19	54	m	m	41	0	4	34	3	33	2	9	15	65	8	78	46	
Greece	100	18	54	90	20	40	6	3	8	8	43	2	17	12	61	9	76	67	
Hungary	94	19	53	91	21	42	0	7	12	0	43	4	9	25	77	8	94	56	
Iceland <sup>1</sup>	87	21	57	58	26	46	2	14	14	1	33	2	11	21	58	10	92	62	
Ireland	98	19	50	44	31	66	0	11	4	1	2	16	55	11	40	41	82	41	
Israel	100	17	52	100	17	49	m	m	m	m	m	m	m	m	m	m	m	m	
Italy	100	18	62	100	19	40	0	2	36	9	29	4	2	17	56	13	65	55	
Japan	m	m	51	m	m	43	0	0	31	0	42	13	6	8	63	10	85	79	
Korea	m	m	48	m	m	43	0	17	19	12	44	2	2	5	75	18	82	54	
Latvia	100	19	53	90	22	40	0	9	12	5	42	3	2	27	75	9	98	64	
Luxembourg	100	18	53	95	20	46	9	4	36	2	28	4	9	7	60	9	79	61	
Mexico	98	18	53	97	18	50	m	m	m	m	m	m	m	m	m	m	m	m	
Netherlands	100	17	52	79	23	50	2	4	21	4	18	4	26	21	52	8	88	41	
New Zealand	100	18	51	44	31	60	1	19	33	1	14	11	8	14	77	11	65	66	
Norway	97	19	57	59	27	39	0	2	5	2	46	3	23	19	82	7	88	45	
Poland	92	21	60	99	20	35	0	2	14	11	46	4	0	24	65	10	71	75	
Portugal	98	18	57	88	21	45	0	8	20	10	24	2	12	25	60	16	84	56	
Slovak Republic	99	18	60	95	19	46	2	6	21	1	35	3	8	25	69	10	83	60	
Slovenia	100	19	60	100	19	44	8	4	17	6	32	5	14	14	64	7	71	56	
Spain	96	18	55	61	26	53	0	33	12	6	16	1	21	12	64	16	70	44	
Sweden	100	18	54	100	18	42	0	2	8	0	45	8	17	20	65	9	76	65	
Switzerland	97	20	57	89	22	45	0	3	33	3	34	5	14	9	61	12	89	59	
Turkey	92	19	52	97	18	48	0	4	15	15	37	0	20	8	57	16	92	61	
United Kingdom	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	
United States	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	
OECD average	98	19	55	80	23	46	1	6	20	4	33	5	14	17	65	12	83	59	
EU22 average	98	19	56	85	22	46	2	6	19	4	32	5	15	18	65	12	82	58	
<b>Partners</b>																			
Argentina <sup>1</sup>	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	
Brazil	91	19	57	84	20	60	18	2	20	19	17	9	8	8	67	29	83	64	
China	m	m	49	m	m	46	m	m	m	m	m	m	m	m	m	m	m	m	
Colombia	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	
Costa Rica	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	
India <sup>1</sup>	m	m	m	m	m	19	2	1	1	2	92	0	2	0	67	17	46	49	
Indonesia	100	18	51	100	18	36	0	2	50	0	35	1	3	9	36	30	60	43	
Lithuania	96	19	53	94	20	36	0	4	18	1	46	3	0	28	50	4	100	74	
Russian Federation	m	m	55	m	m	22	m	m	m	m	m	m	m	m	m	m	m	m	
Saudi Arabia	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	
South Africa	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	
G20 average	m	m	53	m	m	43	2	6	24	6	38	4	10	11	62	16	76	56	

1. Year of reference 2013.

 Sources: OECD, Argentina, China, Colombia, Costa Rica, India, Indonesia, Saudi Arabia, South Africa: UNESCO Institute for Statistics. Lithuania: Eurostat. See Annex 3 for notes ([www.oecd.org/education/education-at-a-glance-19991487.htm](http://www.oecd.org/education/education-at-a-glance-19991487.htm)).

Please refer to the Reader's Guide for information concerning symbols for missing data and abbreviations.


 StatLink  <http://dx.doi.org/10.1787/888933396648>

Table A2.3. Profile of post-secondary non-tertiary graduates from vocational programmes (2014)

	Percentage of females graduates	Percentage of graduates younger than 30 years	Average age	Percentage of graduates by field of education								
				Education	Humanities and arts	Social sciences, business and law	Sciences	Engineering, manufacturing and construction	Agriculture	Health and welfare	Services	
				(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	
<b>OECD</b>												
Australia	55	36	36	22	4	32	4	12	2	18	8	
Austria	74	40	34	32	2	10	1	1	1	53	1	
Belgium	52	97	21	0	6	11	1	22	2	34	23	
Canada	m	m	m	m	m	m	m	m	m	m	m	
Chile	a	a	a	a	a	a	a	a	a	a	a	
Czech Republic	52	m	m	m	m	m	m	m	m	m	m	
Denmark	73	26	37	0	0	97	0	0	0	3	0	
Estonia	63	63	29	0	6	18	5	25	9	6	32	
Finland	56	11	42	3	1	45	0	28	1	8	13	
France	m	m	m	0	59	16	7	2	0	1	15	
Germany	61	m	m	0	3	26	3	18	1	40	9	
Greece	61	84	24	17	4	11	9	15	1	26	16	
Hungary	48	89	23	1	3	17	10	27	3	23	16	
Iceland <sup>1</sup>	36	42	33	4	3	1	6	46	1	0	38	
Ireland	33	69	29	23	0	0	0	24	47	0	6	
Israel	a	a	a	a	a	a	a	a	a	a	a	
Italy	52	m	m	m	m	m	m	m	m	m	m	
Japan	m	m	m	m	m	m	m	m	m	m	m	
Korea	m	m	m	m	m	m	m	m	m	m	m	
Latvia	68	82	25	0	5	13	1	16	5	24	35	
Luxembourg	28	63	29	1	9	0	0	66	2	0	23	
Mexico	a	a	a	a	a	a	a	a	a	a	a	
Netherlands	25	34	37	31	0	0	1	69	0	0	0	
New Zealand <sup>2</sup>	60 <sup>d</sup>	62 <sup>d</sup>	29 <sup>d</sup>	1 <sup>d</sup>	25 <sup>d</sup>	24 <sup>d</sup>	7 <sup>d</sup>	11 <sup>d</sup>	4 <sup>d</sup>	14 <sup>d</sup>	13 <sup>d</sup>	
Norway	65	52	32	0	9	34	0	1	2	28	27	
Poland	75	72	28	0	7	20	5	2	2	34	30	
Portugal	37	85	24	0	6	14	10	31	6	6	29	
Slovak Republic	47	71	26	8	1	17	0	19	1	14	40	
Slovenia	a	a	a	a	a	a	a	a	a	a	a	
Spain	a	a	a	a	a	a	a	a	a	a	a	
Sweden	52	49	32	9	3	19	9	26	4	22	9	
Switzerland	a	a	a	a	a	a	a	a	a	a	a	
Turkey	a	a	a	a	a	a	a	a	a	a	a	
United Kingdom	a	a	a	a	a	a	a	a	a	a	a	
United States	60	m	m	1	6	10	4	18	1	37	23	
OECD average	54	59	30	7	7	20	4	22	4	18	18	
EU22 average	53	62	29	7	7	20	4	23	5	17	17	
<b>Partners</b>												
Argentina	m	m	m	m	m	m	m	m	m	m	m	
Brazil	56	68	27	0	2	21	10	22	3	26	16	
China	25	m	m	m	m	m	m	m	m	m	m	
Colombia	m	m	m	m	m	m	m	m	m	m	m	
Costa Rica	m	m	m	m	m	m	m	m	m	m	m	
India <sup>1</sup>	71	m	m	71	0	0	0	0	0	28	0	
Indonesia	a	a	a	a	a	a	a	a	a	a	a	
Lithuania	50	79	26	0	6	28	2	26	3	8	27	
Russian Federation <sup>3</sup>	47	m	m	1 <sup>d</sup>	5 <sup>d</sup>	3 <sup>d</sup>	48 <sup>d</sup>	8 <sup>d</sup>	1 <sup>d</sup>	32 <sup>d</sup>	2 <sup>d</sup>	
Saudi Arabia	m	m	m	m	m	m	m	m	m	m	m	
South Africa	m	m	m	m	m	m	m	m	m	m	m	
G20 average	53	m	m	14	11	15	11	11	1	26	10	

1. Year of reference 2013.

2. Data on vocational programmes include general programmes.

3. Data for post-secondary non-tertiary include some upper secondary graduates.

Sources: OECD. Argentina, China, Colombia, Costa Rica, India, Indonesia, Saudi Arabia, South Africa: UNESCO Institute for Statistics. Lithuania: Eurostat. See Annex 3 for notes ([www.oecd.org/education/education-at-a-glance-19991487.htm](http://www.oecd.org/education/education-at-a-glance-19991487.htm)).

Please refer to the Reader's Guide for information concerning symbols for missing data and abbreviations.


StatLink  <http://dx.doi.org/10.1787/888933396656>

Table A2.4. **Trends in upper secondary and post-secondary non-tertiary graduation rates (2005, 2010 and 2014)**

Sum of age-specific graduation rates, by gender and programme orientation


	Upper secondary									Post-secondary non-tertiary					
	First-time graduation rates			Graduation rates						First-time graduation rates			Graduation rates		
	All programmes			General programmes			Vocational programmes			All programmes			Vocational programmes		
	2005	2010	2014	2005	2010	2014	2005	2010	2014	2005	2010	2014	2005	2010	2014
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
<b>OECD</b>															
Australia	m	m	m	m	72	74	35	52	80	m	16	20	18	29	44
Austria	m	87	90	m	19	20	m	77	79	m	7	9	m	8	11
Belgium	m	m	m	m	m	38	m	m	55	m	m	m	m	m	7
Canada <sup>1</sup>	80	85	89	78	82	85	3	3	4	m	m	m	m	m	m
Chile	m	m	88	m	m	59	m	m	29	a	a	a	a	a	a
Czech Republic	116	110	74	28	34	22	88	76	57	m	m	30	m	m	8
Denmark	83	85	94	59	58	68	50	49	46	1	1	1	1	1	1
Estonia	m	m	m	60	61	60	19	21	24	m	m	m	19	18	23
Finland	94	95	97	52	46	46	79	90	96	6	7	7	6	7	8
France	m	m	m	50	51	54	62	65	76	m	m	m	0	0	m
Germany	78	m	91	37	m	48	42	m	43	23	m	26	20	m	22
Greece	95	88	m	59	62	70	37	26	33	9	6	m	9	8	4
Hungary	84	86	88	68	69	66	19	17	23	20	18	16	26	20	18
Iceland <sup>1</sup>	m	m	89	m	m	74	m	m	50	m	m	12	m	m	12
Ireland	92	86	m	m	130	111	a	a	45	14	10	m	14	10	13
Israel	89	91	90	57	58	53	32	33	37	m	m	m	a	a	a
Italy	85	85	93	31	36	38	69	61	55	6	4	1	6	4	1
Japan	m	95	97	m	72	74	m	23	23	m	m	m	m	m	m
Korea	92	91	95	65	69	78	28	22	17	m	m	m	m	m	m
Latvia	m	m	88	m	64	67	m	25	27	m	3	7	m	3	7
Luxembourg	74	70	74	27	30	33	47	41	43	m	2	2	2	2	2
Mexico	40	45	51	m	m	33	m	m	19	a	a	a	a	a	a
Netherlands	m	m	95	34	39	42	66	84	77	m	m	0	1	1	0
New Zealand	94	91	95	m	70	76	48	60	59	26	30	27	m	m	m
Norway	90	87	84	62	60	62	40	36	37	5	10	4	2	5	4
Poland	m	83	83	55	52	49	42	38	35	14	12	15	14	12	15
Portugal	54	105	97	41	69	41	13	36	56	m	3	6	m	3	6
Slovak Republic	86	86	83	23	26	27	63	60	57	12	10	9	12	10	9
Slovenia	85	94	90	34	38	36	81	71	65	a	a	a	a	a	a
Spain	m	m	74	m	m	53	m	m	29	a	a	0	a	a	0
Sweden	m	m	69	m	m	48	m	m	29	m	m	4	m	m	4
Switzerland	m	m	m	35	38	42	65	72	70	m	m	1	1	0	a
Turkey	48	54	68	31	33	34	17	22	34	a	a	a	a	a	a
United Kingdom	m	m	m	m	m	m	m	m	m	a	a	a	a	a	a
United States	74	77	82	m	m	m	m	m	m	17	22	22	17	22	22
OECD average <sup>2</sup>	80	85	85	47	51	50	45	47	49	12	13	10	9	9	11
EU22 average <sup>2</sup>	84	91	88	44	48	47	55	55	55	10	9	7	10	9	8
<b>Partners</b>															
Argentina <sup>1</sup>	m	m	59	m	m	m	m	m	m	m	m	m	m	m	m
Brazil	m	m	64	m	65	62	m	4	6	m	m	7	m	6	8
China	m	m	86	m	m	47	m	m	39	m	m	5	m	m	2
Colombia	m	m	70	m	m	m	m	m	m	m	m	m	a	a	m
Costa Rica	m	m	54	m	m	m	m	m	m	m	m	m	m	m	m
India <sup>1</sup>	m	m	m	m	m	m	m	m	2	m	m	1	m	m	1
Indonesia	m	m	69	m	m	40	m	m	29	a	a	a	a	a	a
Lithuania	m	m	92	m	m	77	m	m	15	m	m	15	m	m	18
Russian Federation	m	m	50	m	m	52	m	m	31	m	m	5	m	m	5
Saudi Arabia	m	m	72	m	m	m	m	m	m	m	m	m	m	m	m
South Africa	m	m	34	m	m	m	m	m	m	m	m	m	m	m	m
G20 average	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m

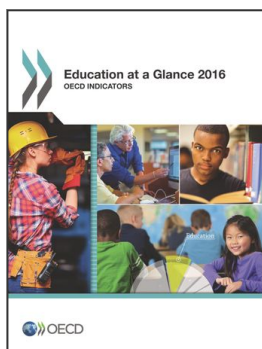
1. Year of reference 2013 instead of 2014.

2. The averages are calculated only from countries with data available for all reference years and so may be different from Table A2.1.

Sources: OECD. Argentina, China, Colombia, Costa Rica, India, Indonesia, Saudi Arabia, South Africa: UNESCO Institute for Statistics. Lithuania: Eurostat. See Annex 3 for notes ([www.oecd.org/education/education-at-a-glance-19991487.htm](http://www.oecd.org/education/education-at-a-glance-19991487.htm)).

Please refer to the Reader's Guide for information concerning symbols for missing data and abbreviations.

StatLink  <http://dx.doi.org/10.1787/888933396669>



**From:**  
**Education at a Glance 2016**  
OECD Indicators

**Access the complete publication at:**  
<https://doi.org/10.1787/eag-2016-en>

**Please cite this chapter as:**

OECD (2016), "Indicator A2 How Many Students are Expected to Complete Upper Secondary Education?", in *Education at a Glance 2016: OECD Indicators*, OECD Publishing, Paris.

DOI: <https://doi.org/10.1787/eag-2016-8-en>

This work is published under the responsibility of the Secretary-General of the OECD. The opinions expressed and arguments employed herein do not necessarily reflect the official views of OECD member countries.

This document, as well as any data and map included herein, are without prejudice to the status of or sovereignty over any territory, to the delimitation of international frontiers and boundaries and to the name of any territory, city or area. Extracts from publications may be subject to additional disclaimers, which are set out in the complete version of the publication, available at the link provided.

The use of this work, whether digital or print, is governed by the Terms and Conditions to be found at <http://www.oecd.org/termsandconditions>.